



Dart Aerospace Ltd.
1270 Aberdeen St
Hawkesbury, ON
K6A 1K7
Canada

Tel (613) 632-5200
Fax 613 632-5246

RBW109-3101-87-113-5
Job Sheet 189590



4624

Part No: RBW109-3101-87-113-5

Job Qty: 4 pcs *6 pcs*

Part Name: Disk



Part Weight: 0 lbs

Status: New

Priority: Medium

Job Created: 1/28/19

Job Tracking No:

Due Date: 3/15/19 *March 27*

Created By: Marie Lajeunesse

Type: SOLD

Description:

Note: DWG RBW109-3101-87-113 Rev.3 IPP Rev. A 19.01.25 New issue DP Verify DD

Ship Via:

Bill of Materials

Job Routing

Op No	Operation	Qty	Start Date	Due Date	Standard		Workcenter/Supplier	Sign-off
					Setup Hrs	Run Hrs		
100	Conventional Lathe - 1	4 pcs	3/15/19		0.00	8.00	Conventional Lathe - 1	<i>19-319</i>
							Conventional Lathe - 2	
110	QC 2	4 pcs	3/15/19		0.00	0.00	QC 2 - 1	
							QC 2 - 12	
							QC 2 - 14	
							QC 2 - 17	
							QC 2 - 19	
							QC 2 - 2	
							QC 2 - 20	
							QC 2 - 22	
							QC 2 - 23	
							QC 2 - 25	
							QC 2 - 32	
							QC 2 - 33	
							QC 2 - 35	
							QC 2 - 38	
							QC 2 - 39	
							QC 2 - 4	
							QC 2 - 40	
							QC 2 - 44	
							QC 2 - 45	
							QC 2 - 48	
							QC 2 - 49	
							QC 2 - 50	
							QC 2 - 51	
							QC 2 - 52	
							QC 2 - 54	
							QC 2 - 56	
							QC 2 - 57	
							QC 2 - 62	
							QC 2 - 63	



Container No: S163329



Part: RBW109-3101-87-113-5

Job No: 189590

Serial No/Batch: S163329

Revision: 3

Inspector:

Exp Date:

Instructions:

Dart Aerospace Ltd.
1270 Aberdeen Street
Hawkesbury, ON K6A 1K7
CANADA
TEL.: 1 613 632-5200
Email: sales@dartaero.com
www.dartaerospace.com

Date: 03/18/19

Plex 1/28/19 3:16 PM Dart.lajeunesse.marie

120	QC 8	4 pcs	3/15/19	0.00 0.00	QC 2 - 8	
					QC 8 - 12	
					QC 8 - 14	
					QC 8 - 17	
					QC 8 - 20	
					QC 8 - 25	
					QC 8 - 3	
					QC 8 - 32	
					QC 8 - 33	
					QC 8 - 35	
					QC 8 - 38	
					QC 8 - 39	
					QC 8 - 4	
					QC 8 - 44	
					QC 8 - 45	
					QC 8 - 49	
					QC 8 - 58	
					QC 8 - 8	DA 19-05-19
					QC 8 - 9	
					QC 8 - 68	
130	Outsource - 13 - Zinc Plating	4 pcs	3/15/19		GRO002-VC	03/25/2019 PL
140	Packaging 2-1 - Receive - B4B	4 pcs	3/15/19	0.00 0.00	Packaging 2 - 1 - B4B	
					Packaging 2 - 2 - B4B	
					Packaging 2 - 3 - B4B	
					Packaging 2 - 5 - B4B	
					Packaging 2 - 4 - B4B	
					Packaging 2 - 6 - B4B	
					Packaging 2 - 7 - B4B	
					Packaging 2 - 8 - B4B	
					Packaging 2 - 9 - B4B	
					Packaging 2 - 10 - B4B	
					Packaging 2 - 11 - B4B	
					Packaging 2 - 12 - B4B	
					Packaging 2 - 13 - B4B	DP MAR 25 2019
					Packaging 2 - 14 - B4B	
					Packaging 2 - 15 - B4B	
					Packaging 2 - 16 - B4B	
					Packaging 2 - 17 - B4B	
					Packaging 2 - 18 - B4B	
					Packaging 2 - 19 - B4B	
					Packaging 2 - 20 - B4B	
					Packaging 2 - 21 - B4B	
					Packaging 2 - 22 - B4B	
					Packaging 2 - 23 - B4B	
					Packaging 2 - 24 - B4B	
					Packaging 2 - 25 - B4B	
					Packaging 2 - 26 - B4B	
150	QC 6	4 pcs	3/15/19	0.00 0.00	QC 6 - 38	
					QC 6 - 42	
					QC 6 - 9	
					QC 6 - 68	
					QC 6 - 61	
160	Packaging 3-1 - Stock - B4B	4 pcs	3/15/19	0.00 0.00	Packaging 3 - 1 - B4B	
					Packaging 3 - 2 - B4B	
					Packaging 3 - 3 - B4B	
					Packaging 3 - 4 - B4B	
					Packaging 3 - 5 - B4B	
					Packaging 3 - 6 - B4B	
					Packaging 3 - 7 - B4B	

				Packaging 3 - 8 - B4B	
				Packaging 3 - 9 - B4B	
				Packaging 3 - 10 - B4B	
				Packaging 3 - 11 - B4B	
				Packaging 3 - 12 - B4B	
				Packaging 3 - 13 - B4B	
				Packaging 3 - 14 - B4B	
				Packaging 3 - 15 - B4B	
				Packaging 3 - 16 - B4B	
				Packaging 3 - 17 - B4B	
				Packaging 3 - 18 - B4B	
				Packaging 3 - 19 - B4B	
				Packaging 3 - 20 - B4B	
				Packaging 3 - 21 - B4B	
				Packaging 3 - 22 - B4B	
				Packaging 3 - 23 - B4B	
				Packaging 3 - 24 - B4B	
				Packaging 3 - 25 - B4B	
				Packaging 3 - 26 - B4B	
170	QC 21 - SA	4 pcs	3/15/19	0.00 0.00	QC 21 - SA - 21

DAS

MAR 28 2019

Part Op 100 - 1-Machine as per DWG. 2-Debur
 Descriptions: 120 - Engrave T/N and/or P/N number using MARKTRONIC engraver as per DWG.
 130 - -Issue P/O ; _____ -Zinc plate, ASTM B633 TYPE 1 SC2 -Color; Clear -Material type; 4140 -Certificate of
 Conformity is required
 140 - Certificate of Conformity is required

21
9-88

Job BOM

Part / Item	Component Name	Quantity	Operation	Container
MT-4140QT-R1.750	AISI 4140 Quenched & Tempered Steel Round Bar 1.750" Dia.	224 ft (56 ea)	100-Conventional Lathe	S048045

116/length - 1
 (24)

Job Allocations

Operation	Component Part	Required	Inventory	Allocated
100-Conventional Lathe - 1	MT-4140QT-R1.750	224	6	0

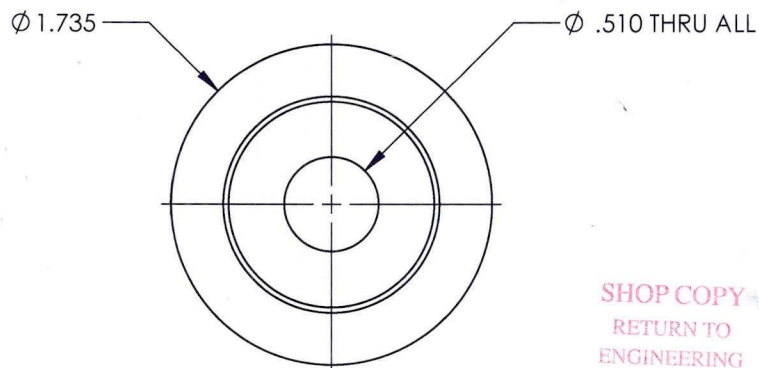
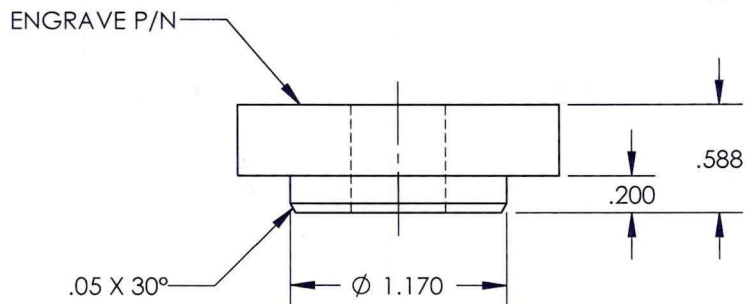
Part Specifications

Specifications could not be found.

Plex 1/28/19 3:16 PM Dart.lajeunesse.marie

This drawing, specifications, and concepts contained here in are the sole property of Dart Aerospace, and may not be reproduced or used in any fashion without the prior written permission of Dart Aerospace Eugene, OR.

REVISIONS					
REV	ECR	DESCRIPTION	DATE	INITIAL	APPROVED
2	15-0283	-5 CH'D ENGRAVE NOTE WAS ENGRAVE RBW109-3101-87-107 IS ENGRAVE P/N, ADDED 4142 Q&T TO MATERIAL CALL OUT.	9/1/2015	RJC	JAG
3	16-0077	-5 CH'D FINISH WAS CAD PLATE YELLOW QQ-P-416, TYPE II, CLASS II IS ZINC PLATE ASTM B633 TYPE 1 SC 2. CH'D MAT'L WAS 4140 Q&T/4142 Q&T IS 4140/4142. ADDED HEAT TREAT RC 28-34.	7/15/2016	DEW	SM



SHOP COPY

RETURN TO
ENGINEERING

UNCONTROLLED COPY

SUBJECT TO AMENDMENT

WITHOUT NOTICE

WORK ORDER

NO. 184590 MWS

19-01-29

⑤

DISK

DART AEROSPACE	
TITLE TOOL ASSY, M/R GRIP BUSHINGS REM/INSTL	
DWG NO. RBW109-3101-87-113-5	REV 3
MAT'L 4140/4142	UNLESS OTHERWISE SPECIFIED
HEAT TREAT RC 28-34	DIMENSIONS ARE IN INCHES
FINISH ZINC PLATE	.XXX ± .005 FRACTIONS ± 1/8
SPEC ASTM B633 TYPE I SC 2	.XX ± .01 ANGLES ± 5°
DRAWN BY: GILBERT	X ± .1 SURFACES = 125/
CHECKED: CLOUGH	1. BREAK ALL SHARP EDGES
OPPS APPR: ANDERSON	.015 x 45° OR .015R
QA APPR: LINDSAY	2. DIMENSIONAL LIMITS APPLY
APPROVED: MACKOVJAK	AFTER PLATING
SCALE 1:1	3. INTERPRET DIM AND TOL PER ASME Y14.5M-2009
DATE 2/24/2014	USED ON MODEL
	AW109, AW119
	SHEET 4 OF 9

Entered: _____ Date: _____



WORK ORDER NON-CONFORMANCE / ROUTE UPDATE

NCR No. _____

Route update only ☐

Job: _____ Part No. _____	DISPOSITION Rework ☐ Scrap ☐ Use-as-is ☐	DEPARTMENT/PROCESS			
		Skid-tube ☐ Machining ☐ Large Fab ☐	Cross tube ☐ Small Fab ☐ Finishing ☐	Eng. (Non-AW) ☐ Prod. Eng. Coord. ☐ Rec/Store/Packaging ☐	Engineering ☐ Water Jet ☐ Supplier ☐ Quality ☐
Date :	Sequence #:	QTY Affected :			MRB (QSI042)
Description Work Order Deviation		Disposition			Completed By
					Lead hand / Supervisor
					QC / QA Coordinator
Root Cause Operator ☐ Manufacturing Process ☐ Equip/Tooling ☐ Handling/Preservation ☐ Material ☐ Product Improvement ☐ Process Improvement ☐ Human Factors ☐		FAULT CATEGORY			
		☐ Pressure/Forced ☐ Bending ☐ Crushing ☐ Cracks ☐ Crimp/Kink/Ripple/Wave/Twist ☐ Marks/Chatter ☐ Mislabeled	☐ Contamination ☐ Misaligned/off center ☐ BOM/Route ☐ Broken/Damage/Defect ☐ Incomplete/Unclear Instructions ☐ Drill Holes ☐ Fit/Function	☐ Power Loss/Surge ☐ Folio/Program ☐ Grain Direction ☐ Weld ☐ Wrong Stock Pulled ☐ Out of Sequence ☐ Off-set/Set-up	☐ Positioned Wrong ☐ Outside Tolerance ☐ Drawing ☐ Finish ☐ Part Lost/Missing ☐ Misread
		Other/Details:			



Dart Aerospace Ltd.
1270 Aberdeen St
Hawkesbury, ON
K6A 1K7
Canada

Tel (613) 632-5200

PURCHASE ORDER

PO042940



Supplier: GRO002-VC
Group Altech
2455 Halpern
St Laurent
QC
H4S 1N9 Canada
Phone: 514-335-3666
Fax: 514-335-3868

Attention: Grenon, Sylvie

Ship To: 1270 Aberdeen Street
Hawkesbury
ON
K6A 1K7 Canada
Phone: 613-632-5200

PO No: PO042940

PO Date: 3/20/19

Due Date: 3/27/19

Purchase Order

Revision:

Revision Date:

Ship-To Contact: Phone:

Via: Ground

Pymt Terms: Net 60

Freight Terms:

Special Comments:

Items

Line Item	Job	Part	Description	Status	Account	Due Date	Order Quantity	Received Quantity	Balance	Unit Price (CAD)	Extended Price
1	189587	RBW109-3101-87-113-1	Reaction, Support Pressure -Issue P/O -Zinc plate, ASTM B633 TYPE 1 SC2 -Color; Clear -Material type; 4140 -Certificate of Conformity is required	Firmed	-	3/27/19	4 pcs	0 pcs	4 pcs	\$6.43/pcs	\$25.72

Line Item Note ** NEED BACK MARCH 27,2019 **

2	189590	RBW109-3101-87-113-5	Disk -Issue P/O -Zinc plate, ASTM B633 TYPE 1 SC2 -Color; Clear -Material type; 4140 -Certificate of Conformity is required	Firmed	-	3/27/19	4 pcs	0 pcs	4 pcs	\$6.43/pcs	\$25.72
---	--------	----------------------	--	--------	---	---------	-------	-------	-------	------------	---------

Line Item Note ** NEED BACK MARCH 27,2019 **



Dart Aerospace Ltd.
1270 Aberdeen St
Hawkesbury, ON
K6A 1K7
Canada

Tel (613) 632-5200

PURCHASE ORDER

PO042940



Items

Line Item	Job	Part	Description	Status	Account	Due Date	Order Quantity	Received Quantity	Balance	Unit Price (CAD)	Extended Price
3	189592	RBW109-3101-87-113-9	Turnbuckle -Issue P/O ;-Zinc plate, ASTM B633 TYPE 1 SC2 -Color; Clear -Material type; 4140 -Certificate of Conformity is required	Firmed - X4	-	3/27/19	4 pcs	0 pcs	4 pcs	\$6.43/pcs	\$25.72

MAR 25 2019

DP

Line Item Note ** NEED BACK MARCH 27,2019 **

Grand Total: \$77.16

Order Notes

Procurement Quality Clauses
A005 right of entry
A012 chemical and physical test report
A016 personnel qualification
A017 raw material identification (as applicable)

A022 Apical Processing
A024 process certifications
A026 certification of material conformance

A041 quality management system
A042 dart notification by supplier
A043 retention of quality documents

A048 counterfeit parts avoidance, detection, mitigation and disposition program

A049 supplier awareness

Terms & Condition of Purchasing(Suppliers) and Procurement Quality Clauses are an integral part of our AS9100 requirements. To learn in detail, please visit www.dartaerospace.com for further explanation.

Plex 3/25/19 3:11 PM dart.Lussier.Patrick



Certificat de Conformité / Certificate of Compliance

(017871-1)

2455, Rue Halpern | Saint-Laurent | Québec | H4S 1N9
 Tel: 514-335-3666 Fax: 514-335-3868
 www.groupaltech.com

Bon de Livraison / Packing Slip

017871- 1

Livré à / Ship to

DART AEROSPACE LTD

1270 ABERDEEN STREET

HAWKESBURY, ON, K6A1K7

CANADA

Tel.: 613-632-5200 Fax.:

Client / Customer:

DART AEROSPACE LTD

1270 ABERDEEN STREET

HAWKESBURY, ON, K6A1K7

CANADA

BUYER:

Date expédition Ship date		Créé Par Generated By	Transport / No de Compte Courier / Acc. No.	Bon de commande Client Customer Purchase Order No.				
25-Mar-2019		Jessie Boisvert		PO042940				
#Ligne Line#	No. de Série / # Pièce Part Number /Line Item Details Job # / Ref #	Description pièce(s)	CATG. U/M	Comm. /Ordered	Exp/ Shipped	Qté NC/ NC Qty	Qté Scrap/	À venir/ Back Order
1	RBW109-3101-87-113-1 Rev.	RBW109-3101-87-113-1 01 -ZINC-CLEAR TRI [ZINC CLEAR TRIVALENT] 24 HRS B633 TYPE 1 SC2	ZINC CH	4	4	0	0	0
2	RBW109-3101-87-113-5 Rev.	RBW109-3101-87-113-5 01 -ZINC-CLEAR TRI [ZINC CLEAR TRIVALENT] 24 HRS B633 TYPE 1 SC2	ZINC CH	4	4	0	0	0
3	RBW109-3101-87-113-9 Rev.	RBW109-3101-87-113-9 01 -ZINC-CLEAR TRI [ZINC CLEAR TRIVALENT] 24 HRS B633 TYPE 1 SC2	ZINC CH	4	4	0	0	0

**DAS
40
9-89**

Notes Additionnelles / Additional Notes

Epaisseur réelle
Actual Thickness

Inspecteur Qualité
Quality Inspector

Réçu par
Received By

Nous certifions que les pièces énumérées ci-dessus ont été traitées en conformité avec votre commande et vos spécifications et rencontrent les exigences.
 Notre responsabilité financière et légale ne sera pas supérieure au montant de la facture issue.

We hereby certify that the parts listed above have been process in accordance with your purchase order and specifications and are in conformance with your requirements.
 Our financial and legal responsibility will not be higher than the amount of invoice.